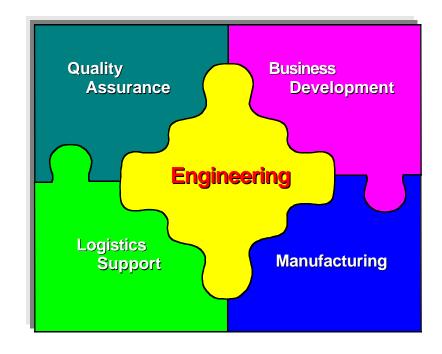


www.dbcontrol.com

Overview

- **♦** Corporate
- **♦ Past Contracts**
- **♦** Major Products
- **♦** Summary

Engineering is the center piece of dB Control's Organization



Corporate Overview

- ♦ 16,000 Square Foot Facility Located in Fremont, CA
- ♦ Support to Military and Commercial Customers
- ♦ Design, Manufacture, and Test High Voltage Power Supplies (HVPS) and Traveling Wave Tube Amplifiers (TWTA)
- Major Supplier of Encapsulated Magnetics for Rugged Environments
- ♦ Engineering Services

Past Performance

Major Customers Product

Arcata Associates Hub Mount TWTA, Remote Control Unit

CPI (Varian) HV Power Supplies, Mechanical

Crowbars, Resistive Loads, HV Transformers

E-Systems (Raytheon) LV & HV Power Supplies, TWTAs

Hughes HV Power Supplies
Australia (DSTO) HV Power Supplies

Sandia Labs HV Power Supplies, TWTAs Tracor TWTAs, HV Power Supplies

Vitro Hub Mount TWTA

Varian HV Power Supply Repair and Refurbishment

Winner of the "Rising Star" Award by Defense Electronics Magazine

Major Products

- TWT Amplifiers (TWTA)
- High Voltage Power Supplies (HVPS)

High Voltage Components

Telecommunications Power Supply



TWT Amplifiers

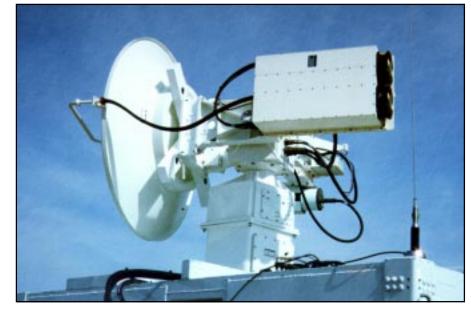
- ♦ High Reliability
 - Δ Military Airborne Applications
 - △ Environmental and Tight Form-Factor Packaging
- **♦** Designed to Custom Specifications
 - △ TWT Selected Based on Customer Requirements
 - Δ Extensive use of COTS NDI
- **♦** Environmental Stress Screening



350 Watt CW, 12.75 - 14.5 GHz

TWTA Amplifiers Continued

- **♦ Commercial or Military Applications**
 - △ Telecommunications
 - Δ Electronic Warfare Training Systems
 - Δ Airborne Jammers
 - **Δ** Towed Decoys



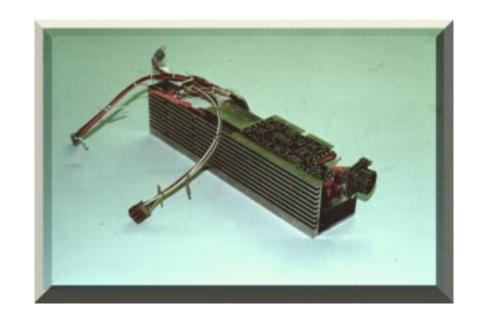
Proof of Principle Threat Simulator with 6 - 18 GHz TWTA

TWTA Summary

| Model Number | Frequency | <u>Power</u> |
|--------------|----------------------------------|------------------------------|
| dB-7400-TBH | 5.65 - 6.425 GHz | 300 Watts |
| (Tri-Band) | 7.9 - 8.4 GHz 14.0 - 14.5 GHz | 373 Watts 300 Watts |
| 6 | 14.0 - 14.3 GHZ | SUU Walls |
| dB-7400-CH | 5.85 - 6.425 GHz | 400 Watts |
| dB-3706 | 8.0 - 18.0 GHz | 2KW Peak, 4% Duty Cycle |
| | | (Airborne Application) * |
| dB-4300-618H | 6.0 - 18.0 GHz | 300 Watts CW, Minimum |
| JD 0004 | 70 100 CH | 200 Watts CW, Minimum |
| dB-3304 | 7.0 - 18.0 GHz | (Airborne Application) |
| | | |
| | | * 50 % Duty Cycle Burst Mode |

Power Supply Design

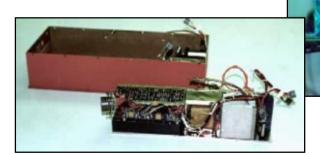
- ♦ Custom Made to Support a Wide Variety of Applications
 - Δ Low Cost to Full Mil Spec
 - Δ Radar
 - Δ Jamming
 - Δ Towed Decoy
 - **Δ** Communications
 - △ Airborne or Ground Systems
- ♦ ESS Screening to Customer Specifications
- **⋄** Follow On Logistics Support



Power Supply Design Continued

- ♦ Towed Decoy HV Power Supply
- ♦ Aircraft 28 VDC Input Power
- ♦ 4.3 KV Output Voltage
- Unit drives up to 100 meters of cable connecting the aircraft to the Towed Decoy

♦ Supports Airborne Jammer Applications



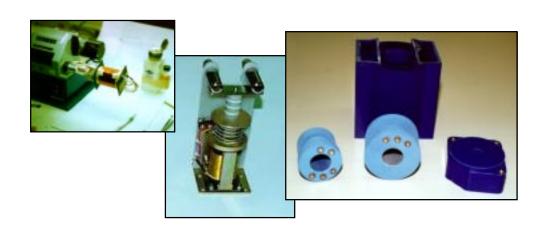
TWT Test Set Power Supply

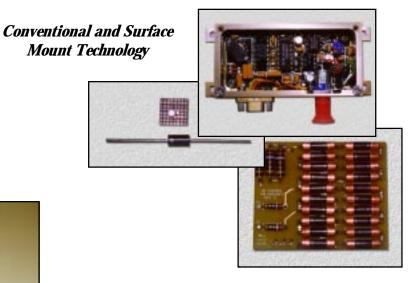
- ♦ Designed for TWT Development Support
 - A Handles 3 Simultaneous TWTs
 - Ω High Power CW
 - Ω Low Power CW
 - Ω Pulsed
 - Δ Provides Hot-Mockup
 - Ω TWT test and evaluation
 - Ω Performance characterization
 - Ω Measurement data collection
 - Ω Burn-in



Component Manufacturing

- ♦ Full Service Potting Lab
- ♦ Innovative Manufacturing
 - △ Custom Coil and Transformer Fabrication
 - △ High Voltage Crowbars
 - Δ Mil Spec Assembly and ESS





Custom Copper Heatsinks to pull the heat out of diode rectifier assemblies

Build-to-Print Manufacturing

- ♦ Quick Turn Around
- ♦ Acceptance Testing
- ♦ ESS Screening As Specified
- **♦** Engineering Documentation



High Voltage Section

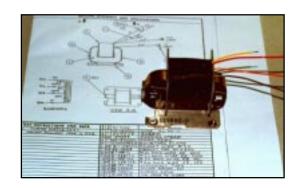


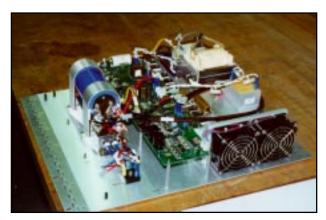
Klystron Power Supply Test Set

Manufacturing Quality Assurance to MIL-I-45208!

Build-to-Print Manufacturing Continued

- **♦ Component or Assembly and Test**
 - **Δ** With Customer Supplied Materials
 - Δ Or, Purchased Through Our Logistics Shop
 - **Δ** Completed Test Procedure
 - Δ Final Quality Inspection
 - △ Direct Shipping





Summary

- ♦ Developed the Industry's First 6 18 GHz, 300W TWTA using a Single TWT
- Developed the TWT Power Supplies used on Sandia National Laboratories X-Band Synthetic Aperture Radar...Met an Extremely Aggressive Delivery Schedule
- ♦ Recognized Major Supplier to Communications and Power Industries (CPI) Satcom Division...Awarded Highest Quality of all Certified Vendors
- ♦ Developed the Complex Aegis Test Sets for Varian

Summary Continued

- Recognized Major Supplier to the X-Ray Industry, and to CPI's Satcom Division...Awarded Highest Quality of all Certified Vendors
- Provided Encapsulated High Voltage Magnetics for a Wide Variety of Customers
- ♦ Manufactured over 700 High Voltage Mechanical Crowbars and Relays Annually within a Kanban Blanket PO "JIT" Structure

For More Information Contact: Rick McGinley Director Business Development

(510) 656-6606, (510) 656-3214 Fax www.dbcontrol.com